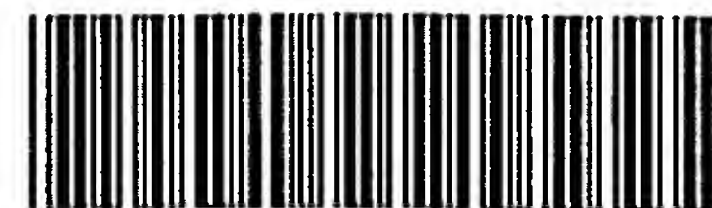


RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10 / 677, 977 B
Source: IFW16
Date Processed by STIC: 02/06/2006

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 02/06/2006

PATENT APPLICATION: US/10/677,977B

TIME: 14:57:41

Input Set : A:\25840-501.txt

Output Set: N:\CRF4\02062006\J677977B.raw

3 <110> APPLICANT: Nguyen, Jack
 4 Thanos, Chris
 5 Ruggles, Sandra Waugh
 6 Craik, Charles S.
 8 <120> TITLE OF INVENTION: METHODS OF GENERATING AND SCREENING FOR PROTEASES WITH
 ALTERED
 9 SPECIFICITY
 11 <130> FILE REFERENCE: 25840-501
 13 <140> CURRENT APPLICATION NUMBER: 10/677,977B
 14 <141> CURRENT FILING DATE: 2003-10-02
 16 <150> PRIOR APPLICATION NUMBER: 60/425,388
 17 <151> PRIOR FILING DATE: 2002-10-02
 19 <160> NUMBER OF SEQ ID NOS: 20
 21 <170> SOFTWARE: PatentIn version 3.3
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 277
 25 <212> TYPE: PRT
 26 <213> ORGANISM: Homo sapiens
 28 <400> SEQUENCE: 1
 30 Met Glu Asn Thr Glu Asn Ser Val Asp Ser Lys Ser Ile Lys Asn Leu
 31 1 5 10 15
 34 Glu Pro Lys Ile Ile His Gly Ser Glu Ser Met Asp Ser Gly Ile Ser
 35 20 25 30
 38 Leu Asp Asn Ser Tyr Lys Met Asp Tyr Pro Glu Met Gly Leu Cys Ile
 39 35 40 45
 42 Ile Ile Asn Asn Lys Asn Phe His Lys Ser Thr Gly Met Thr Ser Arg
 43 50 55 60
 46 Ser Gly Thr Asp Val Asp Ala Ala Asn Leu Arg Glu Thr Phe Arg Asn
 47 65 70 75 80
 50 Leu Lys Tyr Glu Val Arg Asn Lys Asn Asp Leu Thr Arg Glu Glu Ile
 51 85 90 95
 54 Val Glu Leu Met Arg Asp Val Ser Lys Glu Asp His Ser Lys Arg Ser
 55 100 105 110
 58 Ser Phe Val Cys Val Leu Leu Ser His Gly Glu Glu Gly Ile Ile Phe
 59 115 120 125
 62 Gly Thr Asn Gly Pro Val Asp Leu Lys Lys Ile Thr Asn Phe Phe Arg
 63 130 135 140
 66 Gly Asp Arg Cys Arg Ser Leu Thr Gly Lys Pro Lys Leu Phe Ile Ile
 67 145 150 155 160
 70 Gln Ala Cys Arg Gly Thr Glu Leu Asp Cys Gly Ile Glu Thr Asp Ser
 71 165 170 175
 74 Gly Val Asp Asp Asp Met Ala Cys His Lys Ile Pro Val Asp Ala Asp
 75 180 185 190
 78 Phe Leu Tyr Ala Tyr Ser Thr Ala Pro Gly Tyr Tyr Ser Trp Arg Asn

RAW SEQUENCE LISTING

DATE: 02/06/2006

PATENT APPLICATION: US/10/677,977B

TIME: 14:57:41

Input Set : A:\25840-501.txt

Output Set: N:\CRF4\02062006\J677977B.raw

```

79          195          200          205
82 Ser Lys Asp Gly Ser Trp Phe Ile Gln Ser Leu Cys Ala Met Leu Lys
83          210          215          220
86 Gln Tyr Ala Asp Lys Leu Glu Phe Met His Ile Leu Thr Arg Val Asn
87 225          230          235          240
90 Arg Lys Val Ala Thr Glu Phe Glu Ser Phe Ser Phe Asp Ala Thr Phe
91          245          250          255
94 His Ala Lys Lys Gln Ile Pro Cys Ile Val Ser Met Leu Thr Lys Glu
95          260          265          270
98 Leu Tyr Phe Tyr His
99          275

```

102 <210> SEQ ID NO: 2

103 <211> LENGTH: 6

104 <212> TYPE: PRT

105 <213> ORGANISM: Homo sapiens

107 <400> SEQUENCE: 2

109 Phe Ser Phe Asp Ala Thr

110 1 5

113 <210> SEQ ID NO: 3

114 <211> LENGTH: 42

115 <212> TYPE: DNA

116 <213> ORGANISM: Artificial Sequence

118 <220> FEATURE:

119 <223> OTHER INFORMATION: Granzyme B Mutation Forward Primer

121 <400> SEQUENCE: 3

122 ccagcgtata attctaagac agcctccaat gacatcatgc tg

42

125 <210> SEQ ID NO: 4

126 <211> LENGTH: 6

127 <212> TYPE: PRT

128 <213> ORGANISM: Homo sapiens

130 <400> SEQUENCE: 4

132 Ile Glu Thr Asp Ser Gly

133 1 5

136 <210> SEQ ID NO: 5

137 <211> LENGTH: 42

138 <212> TYPE: DNA

139 <213> ORGANISM: Artificial Sequence

141 <220> FEATURE:

142 <223> OTHER INFORMATION: Granzyme B Mutation Reverse Primer

144 <400> SEQUENCE: 5

145 cagcatgatg tcattggagg ctgtcttaga attatacgct gg

42

148 <210> SEQ ID NO: 6

149 <211> LENGTH: 4

150 <212> TYPE: PRT

151 <213> ORGANISM: Homo sapiens

154 <220> FEATURE:

155 <221> NAME/KEY: MISC_FEATURE

156 <222> LOCATION: (1)..(1)

157 <223> OTHER INFORMATION: Amino acid is bound to N-acetyl group.

RAW SEQUENCE LISTING

DATE: 02/06/2006

PATENT APPLICATION: US/10/677,977B

TIME: 14:57:41

Input Set : A:\25840-501.txt

Output Set: N:\CRF4\02062006\J677977B.raw

159 <220> FEATURE:
160 <221> NAME/KEY: MISC_FEATURE
161 <222> LOCATION: (4)..(4)
162 <223> OTHER INFORMATION: Amino acid is bound to a 7-amino-4-methylcoumarin group.
164 <400> SEQUENCE: 6
166 Ile Glu Pro Asp
167 1
170 <210> SEQ ID NO: 7
171 <211> LENGTH: 4
172 <212> TYPE: PRT
173 <213> ORGANISM: Homo sapiens
175 <400> SEQUENCE: 7
177 Ala Glu Ala Lys
178 1
181 <210> SEQ ID NO: 8
182 <211> LENGTH: 4
183 <212> TYPE: PRT
184 <213> ORGANISM: Homo sapiens
186 <400> SEQUENCE: 8
188 Glu Asn Val Lys
189 1
192 <210> SEQ ID NO: 9
193 <211> LENGTH: 4
194 <212> TYPE: PRT
195 <213> ORGANISM: Homo sapiens
197 <400> SEQUENCE: 9
199 Gly Thr Glu Asp
200 1
203 <210> SEQ ID NO: 10
204 <211> LENGTH: 4
205 <212> TYPE: PRT
206 <213> ORGANISM: Homo sapiens
208 <400> SEQUENCE: 10
210 Ser Pro Thr Arg
211 1
214 <210> SEQ ID NO: 11
215 <211> LENGTH: 4
216 <212> TYPE: PRT
217 <213> ORGANISM: Homo sapiens
219 <400> SEQUENCE: 11
221 Val Ser Thr Arg
222 1
225 <210> SEQ ID NO: 12
226 <211> LENGTH: 4
227 <212> TYPE: PRT
228 <213> ORGANISM: Homo sapiens
230 <400> SEQUENCE: 12
232 Ser Thr Ser Phe
233 1

RAW SEQUENCE LISTING

DATE: 02/06/2006

PATENT APPLICATION: US/10/677,977B

TIME: 14:57:41

Input Set : A:\25840-501.txt

Output Set: N:\CRF4\02062006\J677977B.raw

236 <210> SEQ ID NO: 13
237 <211> LENGTH: 4
238 <212> TYPE: PRT
239 <213> ORGANISM: Homo sapiens
241 <400> SEQUENCE: 13
243 Lys Phe Pro Asp
244 1
247 <210> SEQ ID NO: 14
248 <211> LENGTH: 4
249 <212> TYPE: PRT
250 <213> ORGANISM: Homo sapiens
252 <400> SEQUENCE: 14
254 Ala Glu Gln Arg
255 1
258 <210> SEQ ID NO: 15
259 <211> LENGTH: 4
260 <212> TYPE: PRT
261 <213> ORGANISM: Homo sapiens
263 <400> SEQUENCE: 15
265 Lys Tyr Ala Asp
266 1
269 <210> SEQ ID NO: 16
270 <211> LENGTH: 4
271 <212> TYPE: PRT
272 <213> ORGANISM: Homo sapiens
274 <400> SEQUENCE: 16
276 Asn Gly Pro Lys
277 1
280 <210> SEQ ID NO: 17
281 <211> LENGTH: 4
282 <212> TYPE: PRT
283 <213> ORGANISM: Homo sapiens
285 <400> SEQUENCE: 17
287 Ser Ser Ala Tyr
288 1
291 <210> SEQ ID NO: 18
292 <211> LENGTH: 4
293 <212> TYPE: PRT
294 <213> ORGANISM: Homo sapiens
296 <400> SEQUENCE: 18
298 Gly Thr Ser Asp
299 1
302 <210> SEQ ID NO: 19
303 <211> LENGTH: 4
304 <212> TYPE: PRT
305 <213> ORGANISM: Homo sapiens
307 <400> SEQUENCE: 19
309 Ala Gln Glu Lys
310 1

RAW SEQUENCE LISTING

DATE: 02/06/2006

PATENT APPLICATION: US/10/677,977B

TIME: 14:57:41

Input Set : A:\25840-501.txt

Output Set: N:\CRF4\02062006\J677977B.raw

313 <210> SEQ ID NO: 20
314 <211> LENGTH: 4
315 <212> TYPE: PRT
316 <213> ORGANISM: Homo sapiens
318 <400> SEQUENCE: 20
320 Arg Ile Asp Tyr
321 1

VERIFICATION SUMMARY

DATE: 02/06/2006

PATENT APPLICATION: US/10/677,977B

TIME: 14:57:42

Input Set : A:\25840-501.txt

Output Set: N:\CRF4\02062006\J677977B.raw